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REPORT

to the

MONTANA LIVESTOCK SANITARY BOARD

December 1, 1943 to November 30, 1944

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REPORT

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MONTANA LIVESTOCK SANITARY BOARD

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MONTANA LIVESTOCK SANITARY BOARD

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*W. H. Donald, Melville, President

Conrad K. Warren, Deer Lodge, Vice-President

Lyman Brewster, Birney

F. L. Hirschy, Jackson

Clifford J. McNamara, Big Sandy

M. H. Tschirgi, Wyola

***

W. J. Butler

Secretary and Executive Officer
State Veterinary Surgeon
Director of Laboratories

***

*Deceased December 15, 1944

Helena, Montana
December 1, 1944

Honorable Sam C. Ford
Governor of Montana
Helena, Montana

Sir:

In compliance with Section 3292 Political Codes of Montana 1935, we transmit herewith the report of the State Veterinary Surgeon to the Montana Livestock Sanitary Board for the year December 1, 1943 to November 30, 1944.

Respectfully submitted,

MONTANA LIVESTOCK SANITARY BOARD

W. J. Butler, Executive Officer

REPORT OF

MONTANA LIVESTOCK SANITARY BOARD

***

Helena, Montana
December 1, 1944

Honorable Livestock Sanitary Board
Helena, Montana

Sirs:

In compliance with Section 3292 Political Codes of Montana 1935 we submit the report of the State Veterinary Surgeon and Executive Officer of the Montana Livestock Sanitary Board for the year December 1, 1943 to November 30, 1944.

There were four calls issued for meetings of the Livestock Sanitary Board during the year 1944.

The first call for meeting was January 6-7, 1944 at Billings. A quorum was not present at this meeting so no official business was transacted but many matters were discussed with members who attended.

The second meeting or annual meeting was held at Helena on April 10, 1944.

The third meeting was held at Miles City on May 26, 1944.

The fourth meeting was held on September 25, 1944 at Bozeman.

At these various meetings matters of importance to the livestock industry were discussed and acted upon. All actions, regulations and orders promulgated by the Executive Officer were approved by the Board. The complete minutes of all meetings are on file in the Secretary's office in the Livestock Building at Helena, Montana.

FOREWORD

Again we have had a remarkable and prosperous year for the livestock industry. We had good rains and good grass. Probably our grasses were even more nutritive than they have been since the droughts of 1934 and 1936. Prices have remained good. Our sheep population has decreased slightly but our cattle population has increased.

We desire again to call to attention the danger of overstocking as outlined in our annual report for last year.

We also desire to reiterate the statements made in our annual report of last year with reference to the value of meat protein, and the danger that will follow to the physical and mental welfare of the people of the United States if we ever are reduced to a main cereal diet without adequate meat protein protection.

We again desire to call to the attention of the legislative assembly and the livestock industry the absolute necessity for adequate veterinary service

to protect our industry from the ravages of disease. We are a producing State and in order to keep open markets for our livestock they must be maintained in good health. Disease can quickly ruin any industry. There are not enough veterinarians in the State of Montana to give adequate veterinary service. If this is not remedied then sooner or later the livestock industry will sustain serious loss which loss will be reflected directly or indirectly to all industries in the State of Montana.

There are many, many districts in Montana which do not have the services of a graduate veterinarian. In most of these sections it is doubtful if a veterinarian could make a reasonable living without receiving support from the Livestock Sanitary Board. In outlying districts distances are too great for ranchers to employ a veterinarian who might have to travel one hundred or two hundred miles out to a ranch and back to the veterinarian's home, for ordinary veterinary service. This means that a veterinarian will not locate in such an area without assistance from the Livestock Sanitary Board. If trained veterinarians are not strategically located throughout the State it is possible that a dangerous disease might get started which could cost the livestock industry of the State of Montana many hundreds of thousands of dollars before the disease was eventually controlled or eradicated.

We again appeal to the legislative assembly to review the work of this Department very carefully and to value the protection it gives to the livestock industry and the milk consuming and meat consuming public. We do very respectfully request that sufficient funds be appropriated to this Department to employ returning veterinarians who have been in the armed forces so that they may locate in outlying areas and receive a part-time fee for supervising the work of disease prevention and milk production and distribution in these districts.

FINANCES

We again desire to call attention to the legislative assembly that this Department is one of the very few or possibly the only department in the State that has less money available for its work than it had twenty five years ago. We also desire to call to the attention of the legislative assembly the fact that this Department has had many new duties placed upon it such as the inspection and scoring of all dairies and milk plants and supervision over the production and distribution of all fluid milk produced in the State, supervision over sanitary conditions of poultry and prevention and eradication of poultry diseases in the State, enrollment of stallions and carrying out the work of the stallion registration board, and that it has not received one added penny for the extra work which it is now required to do. This is an impossible situation that cannot continue with profit to the State or the livestock industry.

One state on the eastern sea coast I am advised has spent in the neighborhood of $60,000,000 in an endeavor to eradicate tuberculosis alone. It may be said that Montana cattle are not subject to disease as much as are eastern cattle. That is true as long as we keep disease out of the State but let it be definitely understood that livestock diseases may be

transmitted just as easily and probably more so under winter feeding conditions than under stable conditions. Under winter feeding conditions hay generally is thrown on the ground and if there is one animal diseased it is not long before the hay and the pasture become contaminated so that the entire herd or a great portion of the herd may very easily become diseased.

It is perfectly true that through the efforts of the Montana Livestock Sanitary Board and the United States Bureau of Animal Industry cooperating, that many diseases that were prevalent in years gone by now have been controlled or eradicated. It appears that many people consider that inasmuch as a number of heretofore prevalent diseases have been controlled or eradicated, that the work of the Livestock Sanitary Board has been more or less completed. That is a very, very sad mistake. Just as long as there is life there will be disease. The work of the Livestock Sanitary Board either goes ahead or it goes backward. It does not stand still!

We have not controlled brucellosis (Bang's disease) in dairy herds. We can control it in beef herds under range conditions by good herd management and vaccination but in dairy herds where there are calves born every week in the year or oftener and where the disease has a chance to get a good hold the problem of controlling this disease is an intricate one and will require a considerable amount of money to control, let alone eradicate it.

There are a number of insidious diseases which are gradually spreading throughout the United States and some of them have been diagnosed in Montana and eventually more of them may get into our herds. I may refer to anaplasmosis, a disease very prevalent in the southern states; bacillary icterohemoglobinuria (red-water); leptospirosis, asthma, urinary calculi and a number of conditions which we attribute to nutritional difficulties. The longer we wait to control these conditions and the longer we are in determining effective means for their control the greater will be the cost of control and eradication.

The livestock industry is estimated to be the largest industry in the State of Montana. If we take the summer count which includes calves and lambs as well as mature cattle and sheep, we have in the neighborhood of 8,000,000 livestock units not counting swine, horses or poultry in the State of Montana during the past summer. That is the number of livestock units that this Department has to supervise and to prevent as best they can from getting diseased. A veterinarian has to travel just as far to look at a lamb or a calf as he does a sheep or a cow, and it may take just as many trips and laboratory assistance to arrive at a definite diagnosis of the trouble in a lamb or a calf as it does in a mature animal.

The value of livestock in Montana during the past summer was right close to the $200,000,000 mark. That is a sizeable industry and is well worth protecting.

To provide veterinary service for the prevention, control and eradication of livestock diseases, poultry diseases and to supervise the production and distribution of fluid milk in the entire State of Montana and to blood test and tuberculin test dairy cattle annually if possible, and to act as the stallion registration board, to quarantine and reinspect all sheep importa-

tions and to issue quarantines for all livestock found diseased in the State of Montana and to pay indemnity for condemned animals, the Montana Livestock Sanitary Board receives the sum of $57,000 a year from the General Fund plus a tax not to exceed one and one-half mills on the value of livestock. The tax levy is determined by the State Board of Equalization which board may or may not grant the tax requested by the Montana Livestock Sanitary Board. The dilemma in which this Department is placed by a lack of adequate finances may be well realized when we advise you that the amount of indemnity paid for the past year was $19,327.43. If we deducted that amount from our total appropriation you will realize that we have not much left for operation and that if we are to continue our work until the end of the fiscal year that we may have to incur a deficit.

RESEARCH LABORATORY

Montana should have a research laboratory adequately financed by the State. A research laboratory is to the disease-control officer what the flying forces are to the land army. They are the eyes through which we must determine how best to control disease. There are many diseases that we know how to control and we know how to diagnose definitely but there are also a great many diseases for which there is no practical method for diagnosing and no known effective method for their control has yet been devised. An adequate veterinary research laboratory will pay the livestock industry splendid dividends. If our industry was owned and controlled by one big business concern they probably would set aside one percent a year for research. That would bring in in the neighborhood of $2,000,000 a year. We frankly confess that the Montana Veterinary Research Laboratory would not know what to do with $2,000,000 a year but they could very easily and very profitably use an additional $20,000 a year. Twenty thousand dollars a year would only be approximately 1/10 of a mill of the value of our livestock.

We strongly recommend to the livestock industry that they support and see that there is established and maintained in Montana a veterinary research laboratory and station so that these newer diseases and nutritional and parasitic conditions may be properly studied.

LITIGATION

It has been necessary for this Department to degrade several dairies because of their not maintaining their dairy in accordance with existing standards. In most every instance the dairy has made immediate improvements so that it was possible to regrade them.

In a few instances we have not received adequate support from county or city officials. We desire to call to the attention of city and county officials the fact that a city or county is responsible for protecting the health of their people and that if they fail to provide adequate protection that the city or county may be civilly liable.

HORSES

GLANDERS

There were no cases of glanders or dourine found in horses in the State of Montana during 1944.

DISTEMPER

Distemper was not as prevalent during 1944 as it was during 1943.

ENCEPHALOMYELITIS

There were 42 cases of encephalomyelitis reported in horses in Montana during 1944.

INFECTIOUS ANEMIA

We have not been called upon to investigate as many cases of swamp fever (infectious anemia) as we were required to make in 1943.

CATTLE

The entire State of Montana remains a modified accredited tuberculosis-free area and is certified as such by the United States Department of Agriculture.

TUBERCULOSIS

In 1943 there were only 3 cases of bovine tuberculosis found in the entire State of Montana. There were 9 cases found in 1944; 7 of these were in dairy cattle and 2 were in range cattle. A number of years ago there were thousands of cases of tuberculosis found and destroyed each year. While we have controlled this disease to a great extent it is to be remembered that everlasting vigilance and continued tuberculin testing and follow-up work will be required if the disease is to be kept controlled or eradicated.

JOHNE'S DISEASE

No cases of Johne's disease were reported during the year 1944.

SCABIES

No Psoroptic mange nor Sarcoptic mange were diagnosed in the State of Montana during 1944.

ANTHRAX

There was one outbreak of anthrax reported in 1944. The herd in which the infection occurred was a farm herd of 75 cattle. There were 9 animals that died from the disease. All of the cattle in the affected herd were either vaccinated with anthrax vaccine or given serum and all exposed cattle were vaccinated. In accordance with the regulations of the Livestock Sanitary Board all vaccinated cattle were quarantined and held under observation for six weeks following vaccination.

This outbreak, like the slight outbreak we had in 1943 occurred in a district where anthrax previously had never been known to exist. It is presumed that infection was brought in by predatory birds. The outbreak in 1944 occurred in a farm herd. Control measures were somewhat complicated however, by the fact that some of the animals that died from the disease got into and contaminated a reservoir the water from which flowed into adjacent areas.

There have been no deaths reported since the initial outbreak and following the vaccination of exposed animals.

BOVINE BRUCELLOSIS
(Bang's disease)

The work of controlling bovine brucellosis continues under a cooperative agreement with the Bureau of Animal Industry, United States Department of Agriculture. As we have explained previously under finances the money appropriated to this Department has not permitted of a concerted effort to eradicate this disease in all herds with the result that the disease has caused considerable loss in several dairies producing raw milk.

During the past year we blood tested for bovine brucellosis 55,283 cattle with a total of 2,490 reactors or 4.5%. Out of this total number of cattle that were tested there were 2,392 that gave a suspicious reaction or 4.5%.

BACILLARY ICTEROHEMOGLOBINURIA

(Red-water)

There were 18 cases of bacillary icterohemoglobinuria reported in Montana in 1944.

We have outlined and reported this disease in previous reports. We may state, however, that Dr. A. M. Jasmin, special deputy State veterinary surgeon in charge of research work on this disease under Dr. Hadleigh Marsh has isolated the Clostridium hemolyticum in the long bones of animals one year or more after the death of the animal. This indicates the great necessity of proper incineration or the burial of the carcasses of all animals that die of bacillary icterohemoglobinuria in line.

LEPTOSPIROSIS

Leptospirosis is a disease that has just been reported in the United States. It is interesting to note that Dr. Hadleigh Marsh of the Veterinary Research Laboratory has also diagnosed this condition in a herd of cattle.

This disease is caused by an organism, the Leptospira icterohaemoglobinuriae vitulorum. As the name of the organism indicates this also causes icterohemoglobinuria or blood in the urine.

The herd in which this condition was found is a herd that has been on a show circuit in southern states. It is quite possible that these cattle may have picked up the infection when in the southern states as a great number of cases of red-water have been reported in several of our southern states, although as yet these cases have not been diagnosed as bovine leptospirosis.

However this is no definite proof that the disease does not exist in these states as the first report of bovine leptospirosis in the United States was only published in November 1944 by Dr. Erwin Jungherr now of the Storrs Agricultural Experiment Station at Storrs, Connecticut, but who was associated with the Montana Veterinary Research Laboratory for several years.

ANAPLASMOSIS

We reported in 1943 the first finding of anaplasmosis in range cattle in Montana. While we have reason to believe that some cases may have occurred in previously infected herds during 1944, it is pleasing to report that we have no official reports of anaplasmosis in Montana for 1944. Inasmuch as this is a very prevalent disease in many southern states and we know that it is working its way north in increasing incidence each year, it may be surmised that eventually it will become a more prevalent disease in Montana.

It is particularly unfortunate that there is no known method at this time of positively identifying carrier cattle by any field test or laboratory test. It is also very unfortunate that practically all and possibly all recovered cases of anaplasmosis remain as carriers and may spread the disease to susceptible animals.

This disease is transmitted from animal to animal by biting insects or by any operation which necessitates the obtaining or letting of blood from one animal and using the unsterilized instrument used in the operation on other animals. It will be very readily seen therefore that castration, dehorning and all other such operations may be the means of spreading the disease if instruments are not cleaned and sterilized between each operation.

MALIGNANT CATARRH

There was one case of malignant catarrh reported in Montana during 1944.

PULMONARY EMPHYSEMA
(asthma)

Pulmonary emphysema continues to make its appearance usually in the early fall months. As we have advised in previous reports this condition in most instances is seen in lactating cows that have come in from a dry grass summer pasture and placed on a wet pasture. The condition is very seldom if ever seen after we have had several heavy frosts.

As yet we do not know the cause of asthma although we are of the opinion that it is due to a body sensitization.

Just recently some of our field men apparently have had success in treating this condition with methylene blue and other treatments that are used for hydrocyanic acid poisoning, although we are very definitely of the opinion that the condition is not hydrocyanic acid poisoning.

PODODERMATITIS

Pododermatitis our foul foot in cattle continues to make its appearance in many states. We do not know the definite cause of this trouble. As we have advised in previous reports this disease seldom if ever causes the death of an animal, however, if it occurs in bulls it may very effectively interfere with breeding operations.

Usually treatment is effective. We have used Zephiran with considerable success and also ointments of sulfathiazole or sulfapyradine.

URINARY CALCULI

This condition is occurring more frequently and this fall it made its appearance earlier than usual. Urinary calculi as the name indicates, is a condition where calculi are formed in the urethral tract which inhibits the flow of urine. In a number of cases the bladder ruptures and the urine escapes into the abdominal cavity with the result that in many range areas the condition is referred to as water-belly.

This Department has mimeographed copies of a leaflet outlining the operation as well as medicinal treatment for this condition.

VARIOUS DISEASES

There were isolated cases of coccidiosis, malignant edema, infectious keratitis (pink eye), blackleg and a number of minor disease conditions reported in cattle in 1944. However, there were no serious outbreaks of a dangerous disease and there were no cases of screw-worm infestation reported in Montana during 1944.

SHEEP

SCABIES

Sheep scabies does not exist in the State of Montana and has not existed in our native sheep for the past 28 years.

FOOT-ROT

There were very few cases of foot-rot reported in sheep during the year 1944.

INTESTINAL PARASITES

This Department, in conjunction with the Veterinary Research Laboratory, has done considerable work investigating internal parasite infestation of sheep. We have advised of this condition in previous reports and the Veterinary Research Laboratory has published several leaflets on internal parasites, copies of which may be secured by interested stockmen who request them.

In areas where internal roundworms are responsible for unthriftiness and diarrhea in lambs we recommend that the ewes be fed phenothiazine in salt in proportion of ten pounds of phenothiazine to one hundred pounds of salt, and that this salt mixture be given to the ewes starting in one month before they go to their lambing range and that it be kept before them during the summer months just as long as the ewes will eat salt.

If the roundworms, the Nematodirus or the Trichostrongylus are the worms involved, we doubt very much if it is practical to worm out the mature ewes in the fall as the eggs of this particular parasite remain viable on the ground for a year or longer. If the worm known as the Haemonchus contortus is present then it may pay to worm out the sheep in the fall as the egg of this worm does not live over the winter months. Even if the sheep are wormed out during the fall it is desirable to feed them phenothiazine in salt starting in a month before they go to their lambing range. Phenothiazine

given in salt is not taken in sufficient quantities to kill the parasites in the intestinal tract of mature sheep, but what it does do is to prevent the eggs from hatching out into the infective larval stage, which, of course, means that the lambs do not pick up infestation.

So far as I know research work never has been carried on to determine the value of feed in the prevention of worm infestation or the bad effects that follow heavy worm infestation. We believe that a research project to determine the value of feed with reference to worm infestation would be a worthwhile research problem.

We do know from actual experience and observation that our worst worm infestation usually is found in districts where we have a food deficiency.

We do know that we have rather heavy worm infestation in some of our mountain valleys and that under valley pasture conditions there is every opportunity for heavy infestation. However, we practically never see ill effects from worm infestation in our mountain valley lambs that are taken in to the mountains for summer grazing.

We do recommend to sheep breeders in districts where worm infestation is rather heavy and where they operate under short grass conditions that they endeavor to supplement the feed of their ewes and lambs prior to lambing and following lambing in an endeavor to supply the ewe with an abundance of milk and keep up the body growth and resistance of lambs.

NODULAR WORMS

Oesophagostomum columbianum has never been reported or observed in sheep in Montana.

VARIOUS DISEASES

Various minor diseases were found in sheep during 1944 but nothing that was of a serious nature.

SWINE

HOG CHOLERA

During the year 1944 hog cholera was found on 25 premises as compared with 62 premises in 1943.

ERYSIPELAS

As we stated in our report for 1943 for some as yet unknown reason, the incidence of erysipelas in swine is increasing throughout the United States. We have been able to control this disease quite effectively with the use of swine erysipelas serum.

There is a living virus that is used in some states in conjunction with the serum treatment, however, we have not looked with favor on the use of this living virus and so far it has not been used in Montana.

VARIOUS DISEASES

Worm infestation and various diseases were found in swine in 1944 but none of these conditions were of a serious nature.

WILD ANIMALS, GAME BIRDS AND FISH

During the year 1944 as in past years a number of investigations and laboratory examinations were made on wild animals, game birds and fish for the State Fish & Game Commission.

DOGS

RABIES

Rabies or hydrophobia does not exist in Montana and has not been reported in the State since 1925.

POULTRY

Our poultry work grows each year and particularly the work on poultry performed by the bacteriological and pathological laboratory. We trust that a poultry improvement board will be created in Montana to work in conjunction with the Montana Livestock Sanitary Board so that our poultry industry may receive proper recognition and protection.

DAIRY INSPECTION

Dairy inspection work has increased very greatly with the advent of war and resultant labor shortage. Subsidies also have entered into the picture to a very great extent. It may be stated very definitely that subsidies do not assist sanitary officials. They have just the opposite effect. I am quite sure that sanitary officials will be very glad when dairy production gets back to normal.

We have been advised by officials and representatives of manufacturers of dairy equipment that the dairy industry in Montana has improved very greatly in the past several years. We know that the great majority of dairy men endeavor to produce a safe wholesome milk product. At the present time they are handicapped very materially by labor shortage. Dairy help is skilled labor. A poor milker or one not versed in the handling of animals can very easily lower the production of an animal. Improper milking is one of the great causes of mastitis and mastitis is becoming the No. 1 disease problem of the dairy industry.

In 1944 the Livestock Sanitary Board issued 719 dairy licenses and 50 milk plant licenses.

MEAT INSPECTION

Official State meat inspection still is being carried on at eight abattoirs. Proper meat inspection protects public health. Army and Navy regulations require that all meats supplied to our armed forces must be inspected and passed by a Federal veterinarian or a veterinarian approved by the Federal Government.

Future health protection will demand meat inspection in all of our populated areas.

In 1944 the Livestock Sanitary Board issued 59 slaughterhouse licenses. This does not mean that meat inspection is maintained at these slaughterhouses. It simply means that they have passed sanitary inspection and that they have been issued a license to slaughter animals for food, in accordance with the law of Montana.

MONTHLY LETTER

This Department issues a monthly letter on the various disease conditions of livestock observed during the previous month. This monthly letter goes into detail on conditions, regulations, treatment, and control and is mailed to every licensed veterinarian in the State of Montana as well as to each member of the Livestock Sanitary Board.

CODIFICATION OF LAWS AND REGULATIONS

As reported in the annual report for 1943 we again advise that the livestock sanitary laws of Montana, also rules and regulations of the Livestock Sanitary Board have been codified and printed in pamphlet form known as Volume 2, Number 1, which may be obtained by interested stockmen on request to this Department.

RESEARCH LABORATORY

The Veterinary Research Laboratory has done some excellent work during the past year and this laboratory is deserving of the support of the livestock industry.

BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY

Each year the work of the Livestock Sanitary Board Bacteriological and Pathological Laboratory increases in scope and importance. For a more detailed review of the work of this laboratory we refer you to the report of Dr. E. M. Jonesehild, Bacteriologist and Pathologist.

CHEMICAL LABORATORY

Virgil A. Willson, chemist for the Livestock Sanitary Board entered the armed forces December 17, 1941 and is still with the armed forces. Dr. E. C. Stone, who was employed by the Board as chemist during Mr. Willson's absence joined the United States Navy September 27, 1943 with commission as lieutenant junior grade.

During their absence from the chemical laboratory Dr. H. F. Wilkins has performed routine chemical analysis and he has prepared the report of the chemical laboratory for 1944.

HONORABLE BOARD OF EXAMINERS

We express to the Honorable S. C. Ford, Governor of Montana, the Honorable Sam W. Mitchell, Secretary of State and the Honorable R. V. Bottomly, Attorney General of Montana individually and as members of the State Board of Examiners our sincere personal appreciation and the appreciation of this

Department for their counsel and the understanding assistance which they have rendered this Department. Without their very timely assistance and understanding it is quite possible that this Department might have had to cease operations for several months because of a lack of sufficient finances. The cessation of operations of this Department might have had very serious repercussions and could very easily have lost the livestock industry and the State of Montana many tens of thousands of dollars.

This Department and the livestock industry are indebted to the State Board of Examiners for their timely and understanding assistance.

STOCKGROWERS

The Livestock Sanitary Board corps appreciates the continued outstanding cooperation which the stockgrowers of Montana have rendered this Department.

UNITED STATES BUREAU OF ANIMAL INDUSTRY

We express to Dr. A. W. Miller, Chief Bureau of Animal Industry, United States Department of Agriculture, our sincere appreciation for the splendid work he has performed for the livestock industry of the United States and the cooperation that he has extended to this Department.

We also express to Dr. G. W. Crenen, Federal Inspector in Charge, Bureau of Animal Industry operations in Montana and his efficient and courteous field corps our sincere appreciation for their capable and efficient cooperation.

MONTANA LIVESTOCK SANITARY BOARD CORPS

The field corps of the Livestock Sanitary Board continues to render a very efficient, loyal and capable service.

I express my personal appreciation to each member of the Montana Livestock Sanitary Board personnel and bespeak to you my highest commendation for their loyal and efficient service.

NECROLOGY

It is with sadness and profound grief that we advise you of the passing of our colleague and friend, Dr. Emil Starz. Dr. Emil Starz was chemist for the Livestock Sanitary Board from June 15, 1919 until his retirement April 1, 1930.

Dr. Starz passed away on July 20, 1944 from a heart attack. He had not been in very good health for some little time, but his death came as a shock to his many friends. His passing was peaceful and as he would have wished it.

Montana has lost an outstanding citizen. The veterinary profession and I, personally, have lost a real friend. Dr. Emil Starz was an able and true scientist. His every action was for the advancement of science and for the good of mankind. Never a thought for financial returns for his efforts or glory and praise for himself - always his thoughts were truly scientific for the upbuilding of worldly good.

We shall miss his counsel but more than all we will miss his friendly smile and his warm and sincere friendship.

Howard I. Reeves, chief clerk for the Livestock Sanitary Board for the past fifteen years passed away November 26, 1944. Howard Reeves will be missed very greatly by the entire personnel of the Livestock Sanitary Board. He was an exceptionally courteous and loyal gentleman always thinking first of the welfare of his fellow worker. I doubt if any one in the State's employ has ever worked as much over-time as did Howard Reeves. Seldom was there a Sunday or a holiday that he was not at the office, and there never was a favor or assistance that he could render to any of the field force that was not done gladly and efficiently.

We will miss Howard Reeves but his pleasant smile and the memory of his courtesy will remain with us always.

ADDENDA:

It is with a sorrowful heart that I advise you of the death of William H. Donald, President of the Livestock Sanitary Board. Mr. Donald died at his ranch home at Melville, Montana on December 15, 1944.

W. H. Donald was appointed a member of the Livestock Commission in 1918 and as a member of the Livestock Commission became a charter member of the Livestock Sanitary Board as it is now constituted and attended the first meeting of the Board on March 31, 1921.

No one in the State of Montana had a greater love for the livestock industry than Bill Donald. He gave his time unstintingly and unselfishly for the upbuilding of the livestock industry and the work of the Livestock Commission and the Livestock Sanitary Board.

His memory shall be with us always and the realization of his outstanding character shall be a stimulus for every member of the Livestock Sanitary Board corps to carry on for the protection and upbuilding of the livestock industry.

Respectfully submitted,

W. J. BUTLER
State Veterinary Surgeon and Executive Officer

REPORT OF THE BACTERIOLOGIST & PATHOLOGIST

December 1, 1943 to November 30, 1944

During the past year ending November 30, 1944 there were 60,720 specimens examined in the laboratory. The material consisted of blood, smears, skin scrapings, exudates, feces, pus, parasites, tissues, milk, cream and water.

The species of animal and bird life represented by these specimens were horses, cattle, sheep, swine, dogs, goats, antelope, rabbits, foxes, chickens, turkeys, geese and guinea pigs.

The following is a classified list of diagnoses made giving the number of positive, negative, and suspicious diagnoses made in each case:

		POSITIVE	NEGATIVE	SUSPICIOUS
Abortion, vibrionic	Sheep		8	
Abscesses, (*C. pyogenes*)	Cattle	3		
" Staphylococcic	Cattle	1		
" "	Horses	1		
" Streptococcic	Swine	1		
Actinobacillosis	Sheep	1		
Actinomycosis	Cattle	2		
Anaplasmosis, blood smears	Cattle	2		
Anemia	Swine	1		
Anthrax	Cattle	1	7	
Anthrax	Swine		1	
Arthritis	Sheep	2		
"	Turkeys	1		
Aspergillosis	Chickens	1		
Blackhead	Turkeys	4		
Blackleg	Antelope		1	
"	Cattle	11	9	
Brucella abortus vaccine for viability		1		
Brucellosis agglutination test	Cattle	2,490	50,401	2,392
"	Goats		24	
"	Horses	4	2	
"	Milk	1	4	
"	Swine		19	
Brucellosis, tissues	Cattle		1	
Caseous lymphadenitis	Sheep	1		
Cholera	Swine	2		
Colibacillosis	Chickens	10		
Crop bound	Chickens	1		
Dermatitis	Cattle	1		
"	Dogs	1		
"	Sheep	1		
Eclampsia	Rabbits	1		
Endocarditis	Dogs	1		
Emphysema, mesenteric	Swine	1		

		POSITIVE	NEGATIVE	SUSPICIOUS
Enteritis	Cattle	2		
"	Sheep	1		
Enteritis, infectious	Swine	2		
" mucoid	Rabbits	3		
" necrotic	Swine	3		
Enterotoxemia	Sheep	2		
Erysipelas agglutination test	Swine	24	2	
"	Cattle		3	
Erysipelas, tissues	Swine	10	19	
Fatty degeneration of liver	Cattle	1		
"	Chickens	1		
Fibrillar muscle rupture	Swine	1		
Fibroma	Dogs	1		
Fibrosarcoma	Cattle	2		
Fitness for food, piece of bacon			1	
" pork		3		
" roast beef		1		
" beef steaks		4		
Gout	Chickens	1		
Hematoma	Horses	1		
Hepatic coccidiosis	Rabbits	6		
Identification of specimens:				
Dermacentor albipictus (ticks)		2		
Hover fly larvae		1		
Haematopinus eurysternus (cattle lice)		1		
Ditiscid (beetles)		1		
Dipterous larvae (worms)		1		
Bull snake egg		1		
Cattle lice		1		
Infectious anemia	Horses	1		
Infectious bronchitis	Chickens	26		
Infectious disease examinations:	Cattle		7	
"	Rabbits		1	
"	Sheep		1	
"	Swine		2	
Laryngotracheitis	Chickens	1		
Leukosis	Chickens	8		
Malignant edema	Cattle	3		
Malnutrition	Cattle	1		
Mange	Cattle		22	
"	Dogs		2	
"	Foxes		2	
"	Horses		2	
"	Swine	2	1	
Mastitis, tissues	Cattle	2		
Melanosis	Horses	1		
Navel ill	Cattle	2		
Necrobacillosis	Goat	1		
"	Swine	1		
Necrotic laryngitis	Cattle	1		
Neoplasm	Cattle	1		
"	Swine	1		
No diagnosis	Chickens	19		
"	Sheep	1		
"	Turkeys	3		

		POSITIVE	NEGATIVE	SUSPICIOUS
Normal specimens	Chickens	4		
Papilloma	Cattle	2		
Parasites, fecal examinations	Cattle	11	2	
" " "	Cats		1	
" " "	Dogs	1	7	
" " "	Goats	1		
" " "	Horses	19		
" " "	Sheep	4	1	
Parasites, intestinal examination:				
Ascaris	Chickens	5		
Ascaris	Swine	1		
Coccidial oocysts	Cattle	2		
Coccidial oocysts	Chickens	6		
"	Rabbits	1		
"	Swine		1	
"	Turkeys	16		
Haemonchus contortus	Sheep	1		
Oesophagia	Sheep	1		
Tenuis	Chickens	14		
Toxiasris	Dog	1		
Pasteurellosis	Cattle	3	1	
Pelibacilosis	Cattle	1		
Pendulous crop	Turkey	1		
Peritonitis	Cattle	1		
"	Chickens	7		
"	Rabbits	1		
Perosis	Chickens	4		
Pneumonia	Cattle	3		
"	Rabbits	1		
"	Sheep	1		
"	Swine	1		
Pregnancy test	Mare		1	
Pullorum disease	Chickens	47		
Rabies	Dogs		5	
Ringworm	Horse	1		
Roup	Chickens	2		
Skin lesions (tuberculosis)	Cattle	2		
Tetany, calf	Cattle	1		
Torticollis	Guinea pig	1		
Traumatic ventriculitis	Turkeys	1		
Trauma	Chickens	2		
"	Geese	1		
"	Sheep	3		
"	Turkeys	1		
Tuberculosis	Cattle	1	1	
"	Chickens	10		
"	Swine	1		
Tularemia	Sheep		1	
Unsatisfactory specimens	Cattle	3		
"	Chickens	5		
"	Rabbits	1		
"	Sheep	1		
"	Swine	1		
Urinary calculi	Cattle	1		
Vitamin A deficiency	Chickens	26		
Vitamin D deficiency	Chickens	8		

		POSITIVE	NEGATIVE	SUSPICIOUS
White muscle disease	Cattle	1		
Milk samples for bacterial count		707		
Milk samples for B. coli		131	579	
Milk samples for Brucella abortus agglutinins		15	746	
Milk samples for Streptococcic determination				
	(plate)	82	1,175	
	(smear)	124	1,268	
Water sample for B. coli determination			4	
Totals Dec. 1, 1943 - Nov. 30, 1944:		3,994	54,334	2,392
Totals Dec. 1, 1942 - Nov. 30, 1943:		4,747	51,528	2,127
Biennial totals:		8,741	105,862	4,519

Respectfully submitted,

E. M. Jonschild

E. M. JONESCHILD
Bacteriologist & Pathologist

REPORT OF THE CHEMIST

SAMPLES FOR POISON ANALYSIS
Stomach contents, tissues, etc.

MATERIAL	ARSENIC	LEAD	STRYCHNINE	NEGATIVE	TOTALS
Stomach contents, tissues, etc.					
Bovine	19	2	1	48	70
Canine			8	2	10
Caprine				1	1
Equine			6	2	8
Ovine	2			2	4
Porcine			1	4	5
Poultry (chickens)				2	2
Total:	21	2	16	61	100

MISCELLANEOUS SAMPLES FOR POISON ANALYSIS

MATERIAL	ARSENIC	STRYCHNINE	COPPER CARBONATE	MERCURY	NEGATIVE	TOTALS
Bran	1				1	1
Feed	1					1
Burlap sacking	2					2
Wheat			1			1
Oats		1				1
Scrapings from ice	1					1
Kalsomine						1
Fat		1			1	2
Ground grain				1	1	2
Hamburger					1	1
Pancake					1	1
Dirt					1	1
Total:	5	2	1	1	6	15

MILK AND CREAM SAMPLES

Milk samples official, for solids, sediment and preservatives		640
Milk and cream samples for fat only		16
Milk samples for phosphatase test		135
Indicating proper pasteurization	125	125
Indicating improper pasteurization	10	10
Totals:	135	921

INVESTIGATIONS SYNOPTICALLY ARRANGED
INCLUDING COOPERATIVE WORK
WITH THE
UNITED STATES BUREAU OF ANIMAL INDUSTRY

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HORSES

Dourine - 1944

Number of horses affected	None

Glanders - 1944

Number horses reported and suspected of being affected, mallein tested	1
Reactors	None

Encephalomyelitis - 1944

Number horses inspected	113
Number of cases	42

Miscellaneous Inspections - 1944

Horses inspected for miscellaneous diseases	5,401

Scabies - 1944

Number horses affected	None

Importation Inspections - 1944

Horses clinically inspected and mallein tested at destination	None
Reactors	None
Horses clinically inspected at destination	None
Number affected	None

Tested and Inspected at Port of Entry - 1944

Horses clinically inspected and mallein tested	None
Horses clinically inspected	538
Number diseased	None

Inspections for interstate shipment - 1944

Horses mallein tested for interstate shipment	None
Reactors	None
Number clinically inspected for interstate shipment	11,741

Total number of horses inspected: 17,794

CATTLE

Tuberculosis - 1944

Dairy cattle tested	14,347
Reactors	7
Percentage of reactors	.00048
Other cattle tested	6,988
Reactors	2
Percentage of reactors	.00029

Accredited Tuberculosis-free Herds - 1944

Cattle tested	1,276
Reactors	None

Retests of Imported Cattle - 1944

60-90 day retests	None

Cattle Tested at Port of Entry - 1944

Total	None

Cattle Tested at Destination - 1944

Total	10
Number of reactors	None

Tests for Interstate Shipment - 1944

Cattle tuberculin tested	2,833
Reactors	None

Total number cattle tested for tuberculosis - 1944	25,424
Number reactors	9
Percentage of reactors	.00030

Cattle Scabies - 1944

Number cattle inspected	181,150
Number infected	None

Brucellosis - 1944

Number cattle inspected and blood tested	55,283
Number positive reactors	2,490
Percentage positive reactors	.045
Number suspicious reactors	2,392
Percentage suspicious reactors	.043

Miscellaneous Cattle Inspections - 1944

Number inspections	142,734

Mastitis - 1944

Number clinically inspected	517
Number affected	116

Cattle Inspected at Port of Entry - 1944

Number clinically inspected	128
Disease found	None
Number clinically inspected upon arrival in State	1,100
Disease found	None

Inspections for Interstate Shipment - 1944

Number inspected	105,108
Disease found	None

SHEEP

Scabies and Miscellaneous Diseases - 1944

Number sheep inspected	475,739
Number found affected with scabies	None

Importation Inspections - 1944

Number sheep inspected and quarantined	81,421
Number dipped and quarantined including 1st and 2nd dippings	23
*Re-inspection imported sheep	109,395
Number sheep inspected at port of entry	2,075

*Includes contact native sheep and one or more Re-inspections

Inspections for Interstate Shipment - 1944

Number sheep inspected	1,026,445
Total number sheep inspections - 1944	1,695,098

GOATS

Number goats inspected 1944	496

SWINE

Number inspected for various diseases including hog cholera	156,752
Number premises infected with hog cholera	25
Number inspected at port of entry	2
Number inspected for interstate shipment	3,439
Number inspected for erysipelas	3,550
Number cases of erysipelas	351
Total number swine inspections - 1944	163,543

POULTRY

Number inspected for tuberculosis and various diseases	8,098

DOGS

Number inspected for various diseases	17
Number cases of rabies	None
Number inspected for interstate shipment	1,021
Total number dogs inspected	1,038

GAME AND FUR-BEARING ANIMALS - 1944

Number animals inspected for various diseases	4

GRAND TOTALS

Number animals inspected	2,389,447
Number fowls inspected	8,098
Total number inspections 1944:	2,397,545
Total miles traveled by District Deputies and Sheep Inspectors	178,365
Total miles traveled by resident deputies	43,141
Total number of miles traveled	221,506

IMPORTATION REPORT
MONTANA LIVESTOCK SANITARY BOARD
November 30, 1943 - December 1, 1944

STATE	HC	TEST CHARTS	HORSES HC	HORSES TEST	CATTLE HC	CATTLE TEST	SHEEP	SWINE	DOGS	CATS
Canada	80	43	691		102	199	2,075		1	
Alabama	1								1	
Arizona	6	1	10			1				
Arkansas	1								2	
California	61	2	13		4,159	2	4,492		46	
Colorado	60	33	27		4,651	102		1	15	
Idaho	110	6	291		4,979	17	3,390	4	39	
Illinois	33	26			1	52	1	3	25	
Indiana	2							1	1	
Iowa	24	11				16		10	24	
Kansas	8	49			361	76		6	3	
Kentucky	7	3	3			58			4	
Massachusetts	1								2	
Michigan	7	1				1	1		7	
Minnesota	71	14	1	1	68	137		13	65	
Missouri	13	3	14		973	20		4	4	
Nebraska	39	15	26		50	84		3	37	
N. Mexico	11		1		2,945				1	
Nevada	8		14		100				4	2
N. Dakota	99	80	43	2	913	483	2,807	87	44	
Ohio	9						4	1	7	
Oklahoma	8	1	8			1			5	
Oregon	268	6			452	25	16,707	4	33	
S. Dakota	33	20	4		203	63	4,840	4	5	
Tennessee	4		1						4	
Texas	25	1	35		7,600	1			2	
Utah	19		33		536		4		13	
Washington	333	21	139		6,107	136	31,507	2	229	2
Wisconsin	22	14	6		55	35			20	1
Wyoming	62	75	62		1,499	216	2,037	39	32	
TOTALS:	1,425	425	1,422	3	35,754	1,725	67,865	182	675	5

STANFORD U
WITHDRAWN